

<i>Silurian.</i>	<i>Devonian.</i>	<i>Carboniferous.</i>	<i>Permian.</i>
<i>C. striatella.</i>	<i>C. Falklandica.</i>	<i>C. concentrica.</i>	<i>C. variolata??</i>
— <i>cornuta.</i>	— <i>sarcinulata.</i>	— <i>papilionacea.</i>	
	— <i>dilatata.</i>	— <i>comoides.</i>	
	— <i>crenulata.</i>	— <i>Shumardiana.</i>	
	— <i>nana.</i>	— <i>Dalmaniana.</i>	
	— <i>setigera.</i>	— <i>sulcata.</i>	
	— <i>armata.</i>	— <i>Buchiana.</i>	
	— <i>minuta.</i>	— <i>tuberculata.</i>	
	— <i>convoluta.</i>	— <i>variolata.</i>	
		— <i>elegans.</i>	
		— <i>Laguessiana.</i>	
		— <i>perlata.</i>	

From the inspection of the above table, it appears that the genus *Chonetes* attained its greatest development in the carboniferous system; it is there also that the species present many varieties of form and are of the greatest size. This latter remark applies also to *Productus*, to which *Chonetes* is closely allied. However, the proportion in which this development has taken place is very different for the two genera. With regard to their distribution in time, the following conclusions are drawn from the table above quoted: the two Silurian species belong to the upper beds of the system; in the Devonian system the *C. Falklandica*, *sarcinulata* and *dilatata* characterize the inferior beds, the *C. crenulata*, *nana* and *setigera* are characteristic of the middle portion, and the *C. armata*, *minuta* and *convoluta* are found only in the upper beds of the same system. The *C. concentrica*, *papilionacea*, *comoides*, *Shumardiana*, *Dalmaniana*, *sulcata*, *Buchiana* and *tuberculata* belong exclusively to the inferior beds of the carboniferous system, the *C. elegans* to the middle, and the *C. Laguessiana* and *perlata* to the superior beds of the same system; and lastly, the *C. variolata* belongs to different carboniferous deposits, and appears even to pass into the Permian system.

In a memoir of this nature, it is almost impossible to attain absolute correctness, more especially from the author not having had the means of verifying all the species from original or well-authenticated specimens; independently, however, it is a work of great research, and will be of considerable value to the palæontologist, in placing before him carefully executed figures of the species belonging to these two genera. The volume is in quarto, illustrated by 20 plates, and contains also an alphabetical, synonymical and chronological table of all the species.

*Monographia Heliceorum Viventium, sistens Descriptiones systematicas et criticas omnium hujus familiæ generum et specierum hodie cognitarum.* Auctore LUDOVICO PFEIFFER, Dr. Cassellana. Fasc. 1, 2, 3. Lipsiæ, 1847-48.

It is with great pleasure we announce the appearance of the completion of the first volume of this excellent monograph, containing

the *Helices*. The author gives moderately long and complete comparative descriptions of 3 species of *Anostoma*, 2 *Tomigerus*, 24 *Streptaxis*, 6 *Proserpina*, and 1148 species of *Helix*, with their synonyma most carefully and completely elucidated. It forms one of the most important additions which have lately been made to the study of shells.

Malacologically considered, the work must be regarded as a retrograde movement: the author is a pure conchologist, belonging to the same school as Klein, Montfort and Schumacher, for he pays little or no attention to the animal, and even refuses to adopt genera formed on the study of them: if the same system was followed with regard to the marine mollusca, several groups which are now considered as families, each containing several generally adopted genera, must be reduced to a single genus. In the same manner, the immense number of kinds of *Helices* are arranged together in an artificial manner, without any attention to their relation to one another, which is more to be regretted, as Férussac in his 'Prodromus' arranged the species which he knew in most excellent natural groups; but Dr. Pfeiffer appears to be quite destitute of the faculty of distinguishing or characterizing natural groups, though he describes the species so well. It was the remarkable union of these qualities in the same individual which so eminently distinguished Linnæus, Jussieu and Lamarck from other naturalists, and causes the great value of their works.

A large proportion of the species are described from the English collections, and where the author has not observed the species himself, he quotes descriptions given by its original describers.

## PROCEEDINGS OF LEARNED SOCIETIES.

### LINNÆAN SOCIETY.

Feb. 15, 1848.—The Lord Bishop of Norwich, President, in the Chair.

Read a memoir "On the early stages of the Development of *Le-manæa fluvialilis*, Agardh." By G. H. K. Thwaites, Esq. Communicated by the Rev. M. J. Berkeley, F.L.S.

Mr. Thwaites attributes the neglect of the early condition of this conferva to its having been confounded in this stage with *Trentepohlia pulchella*  $\beta$ . *chalybea*, Harv., with which it is frequently found growing intermingled. He states that it may be observed in great abundance towards the end of November, covering the surface of stones with a uniform, dark olive, somewhat villous coating, and adhering with great pertinacity by means of its minute roots. The structure of the plant at this early stage is found to consist of numerous conferva-like filaments, of about a line in length and sparingly branched. Each filament is about  $\frac{1}{1100}$ th of an inch in diameter, and consists of a single row of cells, which are from 4 to 6 times longer than wide, and have a blue-green endochrome arranged